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G70-D GENERAL PERMIT ENGINEERING EVALUATION

PREVENTION AND CONTROL OF AIR POLLUTION IN REGARD TO THE CONSTRUCTION, MODIFICATION, RELOCATION, ADMINISTRATIVE UPDATE AND OPERATION OF NATURAL GAS PRODUCTION FACILITIES LOCATED AT THE WELL SITE

APPLICATION NO.: G70-D**131C**	FACILITY ID: **017-00145**

- ☐ CONSTRUCTION
- ☒ MODIFICATION
- ☐ RELOCATION
- ☐ CLASS I ADMINISTRATIVE UPDATE
- ☐ CLASS II ADMINISTRATIVE UPDATE

BACKGROUND INFORMATION

Name of Applicant (as registered with the WV Secretary of State's Office): Antero Resources Corporation

Federal Employer ID No. (FEIN): 80-0162034

Applicant's Mailing Address: 1615 Wynkoop Street
City: Denver State: CO ZIP Code: 80202

Facility Name: Balli Wellpad

Operating Site Physical Address: 600 Ramseys Ridge Rd.
If none available, list road, city or town and zip of facility.
City: West Union Zip Code: 26456 County: Doddridge

Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):
Latitude: 39.30211
Longitude: -80.84358

SIC Code: 1311 NAICS Code: 211111	Date Application Received: February 16, 2017
Fee Amount: $1,500	Date Fee Received: February 16, 2017
Applicant Ad Date: February 17, 2017	Newspaper: The Doddridge Independent
Date Application Complete: March 9, 2017	Due Date of Final Action: April 23, 2017

Engineer Assigned: David Keatley

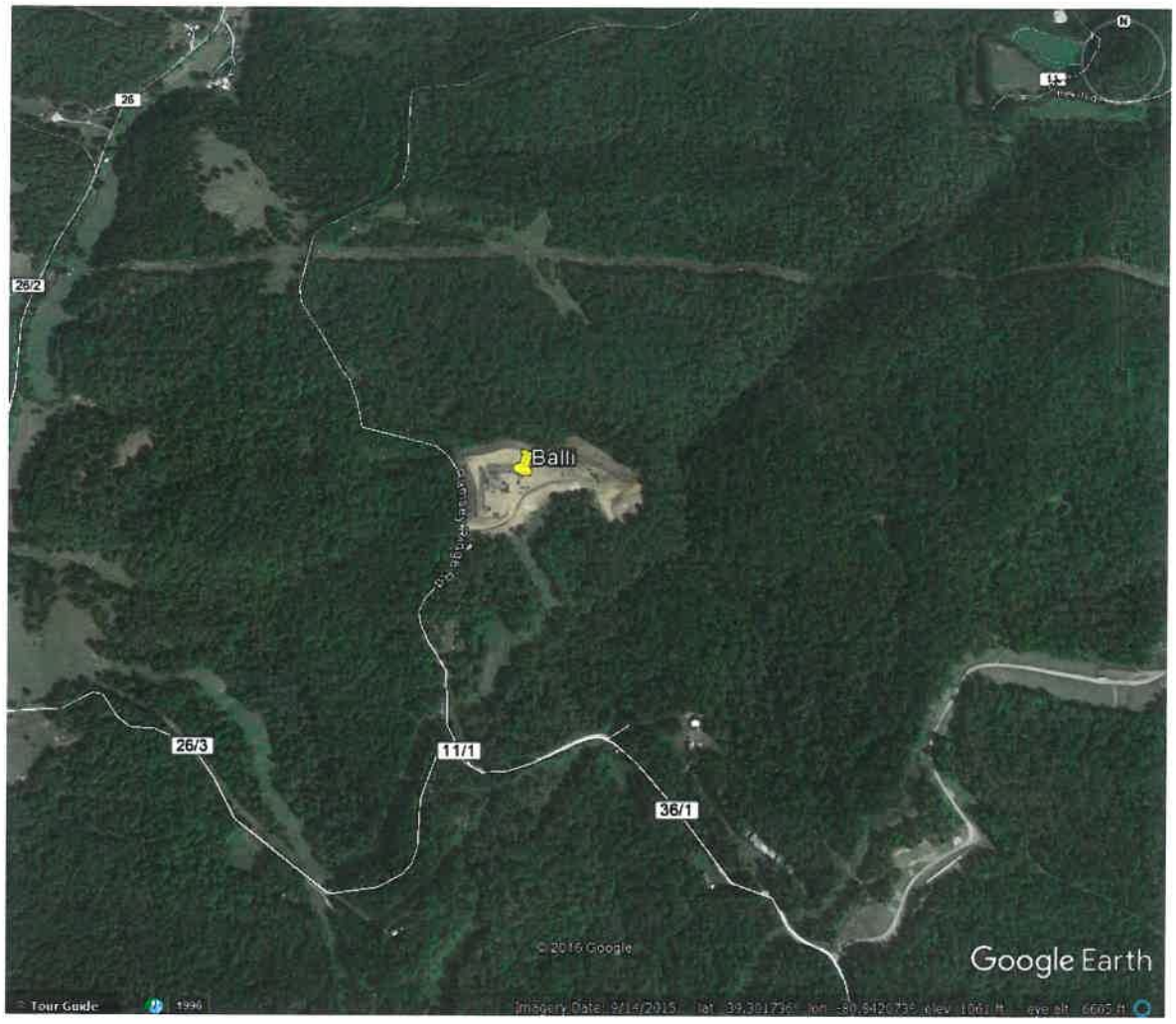
Description of Permitting Action: This permit registration supersedes and replaces G70-A131B. Installation and operation of: two (2) 400-bbl condensate tanks, two 400-bbl produced water tanks, four (4) 76-bhp engines, two (2) thermoelectric generators, and an increase in liquid production. Removal of one (1) 24-bhp engine and one (1) 12-mmBtu/hr enclosed combustor.

PROCESS DESCRIPTION

Operation of natural gas and condensate production facility. Raw natural gas (natural gas, condensate, and produced water) from twelve (12) natural gas wells go to twelve (12) natural gas well heads. The natural gas from the well heads goes to twelve (12) 2.0-mmBtu/hr line heaters (LH001 through LH012) to increase the temperature of the raw natural gas to promote phase separation. The heated raw natural gas goes to twelve (12) 1.5-MMBTU/hr gas producing units (GPU) heaters (GPU001 through GPU012). Natural gas from the GPUs exits the facility via pipeline. Produced water from the GPUs will be sent to four (4) 400-bbl produced water tanks. Condensate from the GPUs is sent to low-pressure two-phase separators. The gas from the two-phase separators is compressed by high-pressure vapor recovery units (VRU) and exits the facility via pipeline. The high-pressure VRUs are powered by three (3) four-stroke rich-burn 76-bhp Ford MSG425 natural gas fired engines. The condensate from the low-pressure two-phase separators goes to vapor recovery towers. The condensate from the vapor recovery towers goes to ten (10) 400-bbl condensate tanks. The gas from the vapor recovery towers goes to a low-pressure VRU to be compressed, then to the high-pressure VRUs, and then exits the facility via pipeline. The low-pressure VRU is powered by one (1) four-stroke rich-burn 75-bhp Ford MSG425 natural gas fired engines. Working, breathing, and flash losses from the condensate tanks and produced water tanks will be controlled to a minimum of 98% control efficiency by three (3) 12-mmBtu/hr Cimarron enclosed combustors (EC001 through EC003). Condensate will be trucked off site at a maximum rate of 19,009,200 gallons/year. Produced water will be trucked off site at a maximum rate of 38,018,400 gallons/year. Two (2) 0.09-mmBtu/hr thermoelectric generators will provide electrical power when needed.

SITE INSPECTION

Site Inspection Date: February 16, 2016
Site Inspection Conducted By: Douglas Hammell
Results of Site Inspection: The site was deemed in compliance.
Did Applicant meet Siting Requirements? Yes
If applicable, was siting criteria waiver submitted? Not Applicable
Directions to Facility: From the intersection of Stone Valley Road (CR 36) and CR 36/1. Travel west on CR 36/1 for approximatley 1.1 miles. Turn right onto Ramsey Ridge Road (CR 11/1) and travel for approximatly 0.3 miles and the access road to the facility is on the right.



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The following table indicates which methodology was used in the emissions determination:

Emission Unit ID#	Process Equipment	Calculation Methodology (e.g. ProMax, GlyCalc, mfg. data, AP-42, etc.)
GPU-001 through GPU-012	GPU Heaters	EPA AP-42 emission factors Section 1.4
LH001 through LH012	Line Heaters	EPA AP-42 emission factors Section 1.4
TANKCOND001 through TANKCOND012	Condensate Tanks	ProMax using representative liquid sample and gas analysis.
TANKPW001 through TANKPW004	Produced Water Tanks	ProMax using representative liquid sample and gas analysis.
L001 and L002	Condensate and Produced Water Truck Loading	EPA AP-42 equation on page 5.2-4, submerged loading, dedicated service
EC001 through EC003	Enclosed Combustors	EPA AP-42 emission factors Section 13.5
ENG001 through ENG007	VRU Compressor Engines	EPA AP-42 emission factors Section 3.2 and manufacturer's data
TEG001 through TEG002	Thermoelectric Generators	EPA AP-42 emission factors Section 1.4

The total facility PTE for the facility (excluding fugitive emissions) is shown in the following table:

Pollutant	Facility Wide PTE (tons/year)
Nitrogen Oxides	26.92
Carbon Monoxide	16.30
Volatile Organic Compounds	4.53
Particulate Matter	1.33
Particulate Matter-10/2.5	1.33
Sulfur Dioxide	0.30
Formaldehyde	0.24
Benzene	0.02
Toluene	0.02
Ethylbenzene	0.01
Xylenes	0.02
n-Hexane	3.72
Total HAPs	4.02
Carbon Dioxide Equivalent	22,342

Emission Point ID	Emission Unit ID	Emission Source	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (tpy)
EP-EC001 through EP-EC003	TANKCOND001 through TANKCOND012, TANKPW001 through TANKPW004, and EC001 through EC003	Cimarron 48" Enclosed Combustors (Controlling: Produced Water Tanks and Condensate Tanks) Emissions per Each	Nitrogen Oxides	0.82	3.58
			Carbon Monoxide	3.72	16.30
			Volatile Organic Compounds	1.03	4.53
			Total Particulate Matter	0.01	0.03
			Benzene	<0.01	0.02
			Toluene	<0.01	0.02
			Xylenes	<0.01	0.01
			n-Hexane	0.16	0.66
			CO_2e	224	979
EP-GPU001 through EP-GPU012	EU-GPU001 through EU-GPU012	Gas Production Unit Burners 1.5 mmBtu/hr (each) Emission per Each	Nitrogen Oxides	0.13	0.534
			Carbon Monoxide	0.11	0.45
			Volatile Organic Compounds	0.01	0.03
			Total Particulate Matter	0.02	0.06
			CO_2e	147	644
EP-LH001 through EP-LH007	EU-LH001 through EU-LH007	Line Heaters 2.0 mmBtu/hr (each) Emission per Each	Nitrogen Oxides	0.16	0.72
			Carbon Monoxide	0.14	0.60
			Volatile Organic Compounds	0.01	0.04
			Total Particulate Matter	0.02	0.06
			CO_2e	196	859
	ENG001 Through ENG003	VRU Compressor Engines	Nitrogen Oxides	0.07	0.28
			Carbon Monoxide	0.41	1.81

EP-ENG001 Through EP-ENG004		76 bhp (each) Emissions per Each	Volatile Organic Compounds	0.02	0.09
			Total Particulate Matter	0.01	0.03
			Formaldehyde	0.02	0.06
			CO_2e	75	326
EP-TEG001 and EP-TEG002	TEG-001 and TEG-002	Thermoelectric Generators 0.09 mmBtu/hr (each)	Nitrogen Oxides	0.01	0.06
			Carbon Monoxide	0.01	0.06
			CO2e	17	75
EP-L001	L001	Condensate Truck Loading 38,018,400 gallons/year	Volatile Organic Compounds	11.27	10.63
			Hexane	1.56	1.47
			CO_2e	1	1
EP-L002	L002	Produced Water Truck Loading 19,009,200 gallons/year	Volatile Organic Compounds	<0.01	<0.01
			CO_2e	1	2

REGULATORY APPLICABILITY

45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers)

The purpose of 45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers) is to establish emission limitations for smoke and particulate matter which are discharged from fuel burning units.

45CSR2 states that any fuel burning unit that has a heat input under ten (10) MMBTU/hr is exempt from Sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date. If the individual heat input of all of the proposed fuel burning units are below 10 MMBTU/hr, these units are exempt from the aforementioned sections of 45CSR2. However, the registrant would be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average. Fuel burning units greater than 10 MMBTU/hr are ineligible for registration under General Permit G70-D

Emission Unit ID#	Emission Unit Description	Maximum Design Heat Input (MDHI) (MMBTU/hr)
GPU-001 through GPU-012	GPU Heaters	1.5 (each)
LH001 through LH012	Line Heaters	2.0 (each)
TEG001 and TEG002	Thermoelectric Generators	0.09 (each)

45CSR6 (To Prevent and Control Air Pollution from the Combustion of Refuse)

45CSR6 prohibits open burning, establishes emission limitations for particulate matter, and establishes opacity requirements. Sources subject to 45CSR6 include completion combustion devices, enclosed combustion devices, and flares.

The facility-wide requirements of the general permit include the open burning limitations §§45-6-3.1 and 3.2.

All completion combustion devices, enclosed combustion devices, and flares are subject to the particulate matter weight emission standard set forth in §45-6-4.1; the opacity requirements in §§45-6-4-3 and 4-4; the visible emission standard in §45-6-4.5; the odor standard in §45-6-4.6; and, the testing standard in §§45-6-7.1 and 7.2.

Enclosed combustion control devices and flares that are used to comply with emission standards of NSPS, Subpart OOOO are subject to design, operational, performance, recordkeeping and reporting requirements of the NSPS regulation that meet or exceed the requirements of 45CSR6.

Emission Unit ID#	Maximum Design Heat Input (MDHI) (MMBTU/hr)	Subject to Weight Emission Standard?	Control Efficiency Claimed by Registrant	Provide Justification how 45CSR6 is met.
EC001 through EC003	12 (each)	☒ Yes ☐ No	98%	The enclosed combustors have a maximum incinerator capacity of 618 lb/hr and an allowable emissions rate is 1.68 lb/hr for total particulate matter. The allowable emissions rate should not be exceeded with an estimated emissions rate of less than 0.01 lb/hr of total particulate matter.

45CSR10 (To Prevent and Control Air Pollution from the Emission of Sulfur Oxides)

45CSR10 establishes emission limitations for SO_2 emissions which are discharged from stacks of fuel burning units. A "fuel burning unit" means and includes any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. Sources that meet the definition of "Fuel Burning Units" per 45CSR10-2.8 include GPUs, in-line heaters, heater treaters, and glycol dehydration unit reboilers.

Fuel burning units less than 10 MMBtu/hr are exempt. The sulfur dioxide emission standard set forth in 45CSR10 is generally less stringent than the potential emissions from a fuel burning unit for natural gas. The SO_2 emissions from a fuel burning unit will be listed in the G70-D permit registration at the discretion of the permit engineer on a case-by-case basis. Issues such as non-attainment designation, fuel use, and amount of sulfur dioxide emissions will be factors used in this determination. Fuel burning units greater than 10 MMBTU/hr are ineligible for registration under General Permit G70-D

Fuel burning units burning natural gas are exempt from Section 8 (Monitoring, Recording and Reporting) as well as interpretive rule 10A. The G70-D eligibility requirements exclude from eligibility any fuel burning unit that does not use natural gas as the fuel; therefore, there are no permit conditions for 45CSR10.

Emission Unit ID#	Emission Unit Description	Maximum Design Heat Input (MDHI) (MMBTU/hr)
GPU-001 through GPU-012	GPU Heaters	1.5 (each)
LH001 through LH012	Line Heaters	2.0 (each)
TEG001 and TEG002	Thermoelectric Generators	0.09 (each)

45CSR13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

45CSR13 applies to this source due to the fact that the applicant is defined as a "stationary source" under 45CSR13 Section 2.24.b. *Stationary source* means, for the purpose of this rule, any building, structure, facility, installation, or emission unit or combination thereof, excluding any emission unit which meets or falls below the criteria delineated in Table 45-13B which: (a) is subject to any substantive requirement of an emission control rule promulgated by the Secretary; (b) discharges or has the potential to discharge more than six (6) pounds per hour and ten (10) tons per year, or has the potential to discharge more than 144 pounds per calendar day, of any regulated air pollutant; (c) discharges or has the potential to discharge more than two (2) pounds per hour or five (5) tons per year of hazardous air pollutants considered on an aggregated basis; (d) discharges or has the potential to discharge any air pollutant(s) listed in Table 45-13A in the amounts shown in Table 45-13A or greater; or, (e) an owner or operator voluntarily chooses to be subject to a construction or modification permit pursuant to this rule, even though not otherwise required to do so. 45CSR13 has an original effective date of June 1, 1974.

The applicant meets the definition of a stationary source because (check all that apply):

☒ Subject to a substantive requirement of an emission control rule promulgated by the Secretary.
☒ Discharges or has the potential to discharge more than six (6) pounds per hour and ten (10) tons per year, or has the potential to discharge more than 144 pounds per calendar day, of any regulated air pollutant.
☐ Discharges or has the potential to discharge more than two (2) pounds per hour or five (5) tons per year of hazardous air pollutants considered on an aggregated basis.
☐ Discharges or has the potential to discharge any air pollutant(s) listed in Table 45-13A in the amounts shown in Table 45-13A or greater.
☐ Voluntarily chooses to be subject to a construction or modification permit pursuant to this rule, even though not otherwise required to do so.

General Permit G70-D Registration satisfies the construction, modification, relocation and operating permit requirements of 45CSR13. General Permit G70-D sets forth reasonable conditions that enable eligible registrants to establish enforceable permit limits.

Section 5 of 45CSR13 provides the permit application and reporting requirements for construction of and modifications to stationary sources. No person shall cause, suffer, allow or permit the construction, modification, relocation and operation of any stationary source to be commenced without notifying the Secretary of such intent and obtaining a permit to construct, modify, relocate and operate the stationary source as required in the rule or any other applicable rule promulgated by the Secretary.

If applicable, the applicant meets the following (check all that apply):

☐ Construction
☒ Modification
☐ Class I Administrative Update (45CSR13 Section 4.2.a)
☐ Class II Administrative Update (45CSR13 Section 4.2.b)

45CSR16 (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)

45CSR16 applies to all registrants that are subject to any of the NSPS requirements described in more detail in the Federal Regulations section. Applicable requirements of NSPS, Subparts IIII, JJJJ, OOOO and OOOOa are included in General Permit G70-D.

The applicant is subject to:
☐ 40CFR60 Subpart IIII
☒ 40CFR60 Subpart JJJJ
☐ 40CFR60 Subpart OOOO
☒ 40CFR60 Subpart OOOOa

45CSR22 (Air Quality Management Fee Program)

45CSR22 is the program to collect fees for certificates to operate and for permits to construct or modify sources of air pollution. 45CSR22 applies to all registrants. The general permit fee of $500 is defined in 45CSR13. In addition to the application fee, all applicants subject to NSPS requirements or NESHAP requirements shall pay additional fees of $1,000 and $2,500, respectively.

Registrants are also required to obtain and have in effect a valid certificate to operate in accordance with 45CSR22 §4.1. The fee group for General Permit G70-D is 9M (all other sources) with an annual operating fee of $200.

40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)

Subpart JJJJ sets forth nitrogen oxides (NOx), carbon monoxide (CO), and volatile organic compound (VOC) emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. The provisions for stationary spark ignition (SI) internal combustion engines for owners or operators of this Subpart have been included in General Permit G70-D, Section 13.

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	Provide Justification how 40CFR60 Subpart JJJJ is met.
ENG001 through ENG004	Ford MSG425	76	2015	☐ Met Emission Standard ☒ Certified Engine

40CFR60, Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015)

EPA published its New Source Performance Standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. EPA published amendments to the Subpart on September 23, 2013 and June 3, 2016.

40CFR60 Subpart OOOO establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO_2) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011 and on or before September 18, 2015. The affected sources which commence construction, modification or reconstruction after August 23, 2011 and on or before September 18, 2015 are subject to the applicable provisions of this Subpart as described below:

Gas well affected facilities are included in General Permit G70-D in Section 5.0.
Are there any applicable gas well affected facilities? ☐ Yes ☒ No

Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this Subpart.

Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

Pneumatic controllers affected facilities are included in General Permit G70-D, Section 10.0.
Are there any applicable pneumatic controller affected facilities? ☐ Yes ☒ No

For the natural gas production segment (between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not including natural gas processing plants), each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh.

Requirements for storage vessel affected facilities are included in General Permit G70-D, Section 7.0. Determination of storage vessel affected facility status is included in Section 6.0 of General Permit G70-D.
Are there any applicable storage vessel affected facilities? ☐ Yes ☒ No
If No, list any emission reduction devices and control efficiencies used to avoid 40CFR60 Subpart OOOO.
None

Each storage vessel affected facility, which is a single storage vessel located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment, and has the potential for VOC emissions equal to or greater than 6 tpy as determined according to this section by October 15, 2013 for Group 1 storage vessels and by April 15, 2014, or 30 days after startup (whichever is later) for Group 2 storage vessels. A storage vessel affected facility that subsequently has its potential for VOC emissions decrease to less than 6 tpy shall remain an affected facility under this subpart.

40CFR60, Subpart OOOOa (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after September 18, 2015)

EPA published its New Source Performance Standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. EPA published amendments to the Subpart on September 23, 2013 and June 3, 2016.

40CFR60 Subpart OOOOa establishes emission standards and compliance schedules for the control of the pollutant greenhouse gases (GHG). The greenhouse gas standard in this subpart is in the form of a limitation on emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification or reconstruction after September 18, 2015. This subpart also establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO_2) emissions from affected facilities that commence construction, modification or reconstruction after September 18, 2015. The effective date of this rule is August 2, 2016.

For each well site, the registrant must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying with fugitive emissions monitoring as required in §60.5397a and the alternative means of emission limitations in §60.5398a.

Gas well affected facilities are included in General Permit G70-D in Section 5.0.
Are there any applicable gas well affected facilities? ☒ Yes ☐ No
If Yes, list.

API Number	Date of Flowback	Date of Well Completion	Green Completion and/or Combustion Device
47-017-06636-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06637-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06713-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06693-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06717-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06716-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06792-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06795-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06797-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06796-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06799-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green
47-017-06798-00	11/1/2018 (Proposed)	3/1/2018 (Proposed)	Green

Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this Subpart.

Each reciprocating compressor affected facility, which is a single reciprocating compressor. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

Pneumatic controllers affected facilities are included in General Permit G70-D, Section 10.0.
Are there any applicable pneumatic controller affected facilities? ☐ Yes ☒ No

Each pneumatic controller affected facility not located at a natural gas processing plant, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh.

Requirements for storage vessel affected facilities are included in General Permit G70-D, Section 7.0.
Are there any applicable storage vessel affected facilities? ☐ Yes ☒ No
If No, list any emission reduction devices and control efficiencies used to avoid 40CFR60 Subpart OOOO.
Enclosed combustors EC001 through EC003 will be used to reduce the emissions from the condensate tanks by at least 98%.

Each storage vessel affected facility, which is a single storage vessel with the potential for VOC emissions equal to or greater than 6 tpy as determined according to this section.

Fugitive Emissions GHG and VOC Standards affected facilities are included in General Permit G70-D in Section 12.0.

Did the registrant commence construction, modification, or reconstruction of the well site after September 18, 2015 and is subject to §60.5397a? ☒ Yes ☐ No

For the purposes of §60.5397a, a "modification" to a well site occurs when a new well is drilled at an existing well site, a well at an existing well site is hydraulically fractured, or a well at an existing well site is hydraulically refractured.

A well site that only contains one or more wellheads is not an affected facility under this subpart. The affected facility status of a separate tank battery surface site has no effect on the affected facility status of a well site that only contains one or more wellheads.

Requirements for pneumatic pump affected facilities are included in General Permit G70-D, Section 16.0.

Are there any applicable pneumatic pump affected facilities at the well site? ☐ Yes ☒ No

Each pneumatic pump affected facility at the well site, which is a single natural gas-driven diaphragm pump. A single natural gas-driven diaphragm pump that is in operation less than 90 days per calendar year is not an affected facility under this subpart as well as the required records are kept.

40CFR63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines)

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This Subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. This section reflects EPA's final amendments to 40 CFR part 63, Subpart ZZZZ that were issued on January 15, 2013 and published in the Federal Register on January 30, 2013.

WVDEP DAQ has delegation of the area source air toxics provisions of this Subpart requiring Generally Achievable Control Technology (GACT). The provisions of this Subpart have been included in this general permit under Section 13.0.

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	New or Existing under 40CFR63 Subpart ZZZZ?	Provide Justification how 40CFR63 Subpart ZZZZ is met.
ENG001 through ENG004	Ford MSG425	76	2015	New	40CFR63 subpart ZZZZ is met by meeting the requirements of 40CFR60 subpart JJJJ.

Are there any engines that fall in the window of being new under 40CFR60 Subpart ZZZZ but manufactured before the applicability date in 40CFR60 Subpart JJJJ? ☐ Yes ☒ No

SOURCE AGGREGATION DETERMINATION

"Building, structure, facility, or installation" is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.

Is there equipment and/or activities used for onshore oil and natural gas production that are located on the same site, or on sites that share equipment and are within ¼ mile of each other?

☐ Yes ☒ No

Is this equipment and/or activities under "common control"?

☒ Yes ☐ No

Do these facilities share the same two (2) digit SIC code?

☒ Yes ☐ No

Final Source Aggregation Decision.

☒ Source not aggregated with any other source.

☐ Source aggregated with another source. List Company/Facility Name:

RECOMMENDATION TO DIRECTOR

The information provided in the permit application, including all supplemental information received, indicates the applicant meets all the requirements of applicable regulations and the applicant has shown they meet the eligibility requirements of General Permit G70-D. Therefore, impact on the surrounding area should be minimized and it is recommended that the facility should be granted registration under General Permit G70-D.

Permit Engineer Signature: David Keatley

Name and Title: David Keatley - NSR Permitting

Date: March 21, 2017